

Multilon® R-2020

TEIJIN LIMITED - Polycarbonate + ABS

General Information

Product Description

Glass fiber reinforced PC/ABS polymer alloy, Automotive series

General

Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Properties	• High Heat Resistance • High Rigidity
Uses	• Automotive Applications
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.26	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/5.0 kg)	7.0	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow : 4.00 mm	0.40 to 0.60	%	
Flow : 4.00 mm	0.10 to 0.30	%	
Water Absorption (24 hr, 23°C)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	5600	MPa	ISO 527-1/1
Tensile Stress (Break, 23°C)	100	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	2.0	%	ISO 527-2/5
Flexural Modulus ² (23°C)	5500	MPa	ISO 178
Flexural Stress ² (23°C)	135	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-30°C	10	kJ/m ²	
23°C	11	kJ/m ²	
Charpy Unnotched Impact Strength (23°C)	32	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/B
0.45 MPa, Unannealed	138	°C	
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	126	°C	
Vicat Softening Temperature	132	°C	ISO 306/B50
CLTE - Flow	3.0E-5	cm/cm/°C	ISO 11359-2
CLTE - Transverse	6.0E-5	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16	ohms	IEC 60093

Multilon® R-2020

TEIJIN LIMITED - Polycarbonate + ABS

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	110	°C
Drying Time	5.0 to 8.0	hr
Processing (Melt) Temp	240 to 270	°C
Mold Temperature	50 to 70	°C

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 mm/min